

## Translation of PCT/EP2004/005728

## New claims

- 5 1. High-frequency measuring system for measuring a  
device under test (19), comprising a measuring-  
device unit (2) and at least one high-frequency  
module (3, 24, 25), wherein each high-frequency  
10 module (3, 24, 25) can be placed spatially  
separately from the measuring-device unit (2) and  
each high-frequency module (3, 24, 25) can be  
connected to the measuring-device unit (2) via a  
digital interface (23, 26, 27),  
characterised in that  
15 the processing of input data to form a bitstream to  
be transmitted via the digital interface (26) takes  
place by assigning the symbols to states in the  
state diagram of the I-Q (in phase - quadrature  
phase) level in the measuring-device unit (2),  
20 and/or that a digitised intermediate-frequency  
signal is transmitted via the digital interface  
(27).
- 25 2. High-frequency measuring system according to claim  
1,  
characterised in that  
the high-frequency module (3, 24, 25) comprises a  
transmitter device and/or a receiver device (28,  
29) for communication with a device under test  
30 (19).
3. High-frequency measuring system according to claim  
1 or 2,  
characterised in that

the digital interface (23, 26, 27) is a serial interface.

4. High-frequency measuring system according to claim  
5 1 or 2, /  
**characterised in that**  
the digital interface (23, 26, 27) is a parallel interface.
- 10 5. High-frequency measuring system according to any  
one of claims 1 to 4,  
**characterised in that**  
the digital interface (23, 26, 27) is an optical  
15 interface.
6. High-frequency measuring system according to any  
one of claims 1 to 4,  
**characterised in that**  
the digital interface (23, 26, 27) is an electrical  
20 interface.
7. High-frequency measuring system according to any  
one of claims 1 to 6,  
**characterised in that**  
25 the at least one high-frequency module (3, 24, 25)  
is supplied with electrical energy via a power-  
supply unit (14, 40) independent from the  
measuring-device unit (2).
- 30 8. High-frequency measuring system according to any  
one of claims 1 to 7,  
**characterised in that**

several identical ports (5.1, 5.2, 5.3) are provided on the measuring-device unit (2) for the digital interface (23).

- 5    9.    High-frequency measuring system according to any  
one of claims 1 to 8,  
**characterised in that**  
several different ports (5.1, 5.2, 5.3, 6.1, 6.2,  
6.3) are provided on the measuring-device unit for  
10    the digital interface (23).
10.    High-frequency measuring system according to any  
one of claims 1 to 9,  
**characterised in that**  
15    control data and/or user data can be transmitted in  
a standardised form via the digital interface and  
that the at least one high-frequency module (24')  
comprises means for processing a high-frequency  
signal with regard to the transmission of data in  
20    standardised form via the digital interface and/or  
for processing the data transmitted in standardised  
form with regard to at least one given transmission  
standard for the high-frequency signal.